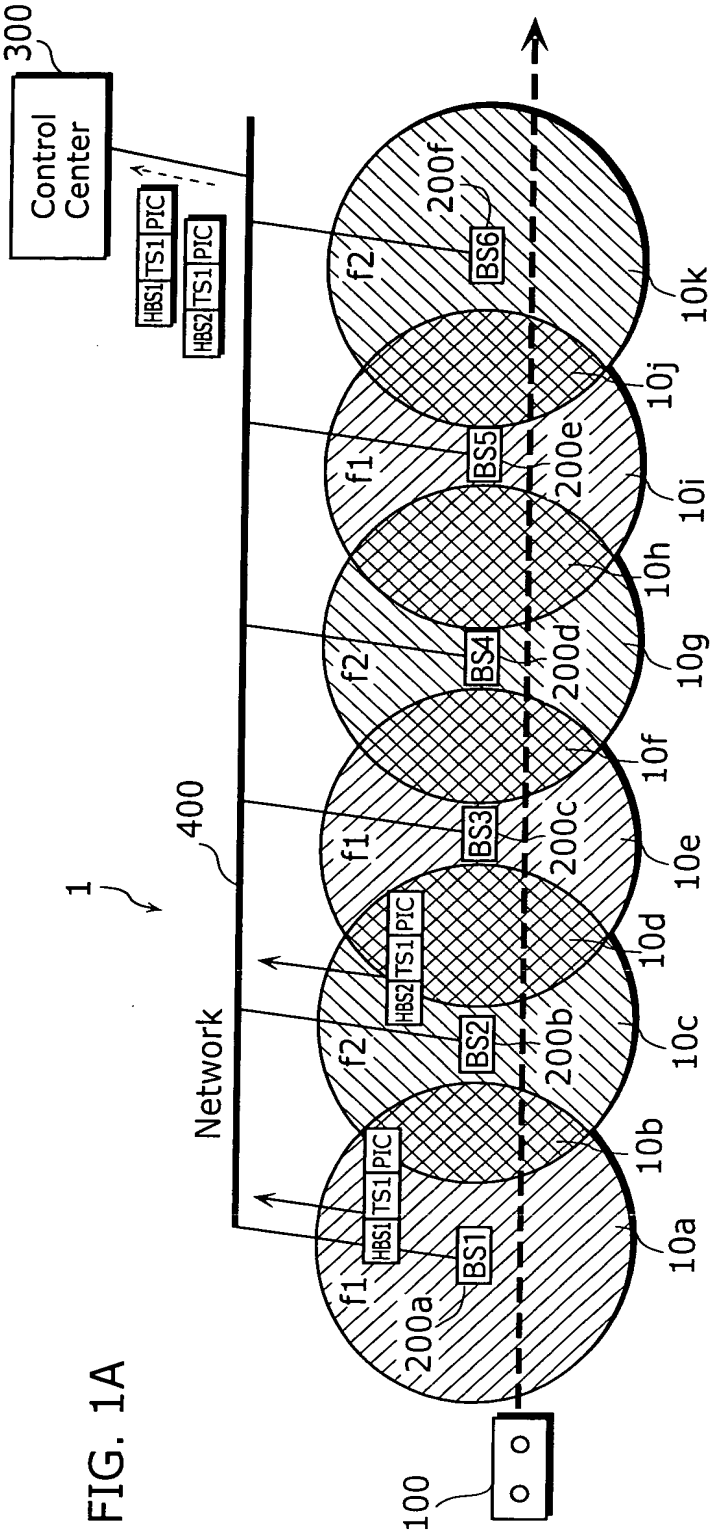

300
Control Center
HBS1 TS1 PIC
HBS2 TS1 PIC
1
400
Network
BS1
BS2
BS3
BS4
BS5
BS6
f1
f2
200a
200b
200c
200d
200e
200f
10a
10b
10c
10d
10e
10f
10g
10h
10i
10j
10k
100

FIG. 1A

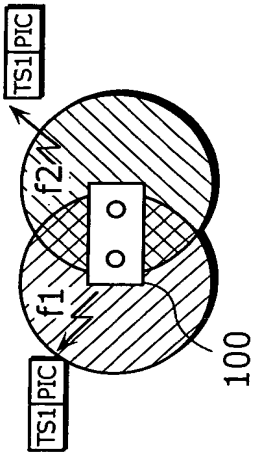

TS1 PIC
f2
f1
TS1 PIC
100

FIG. 1B

FIG. 2

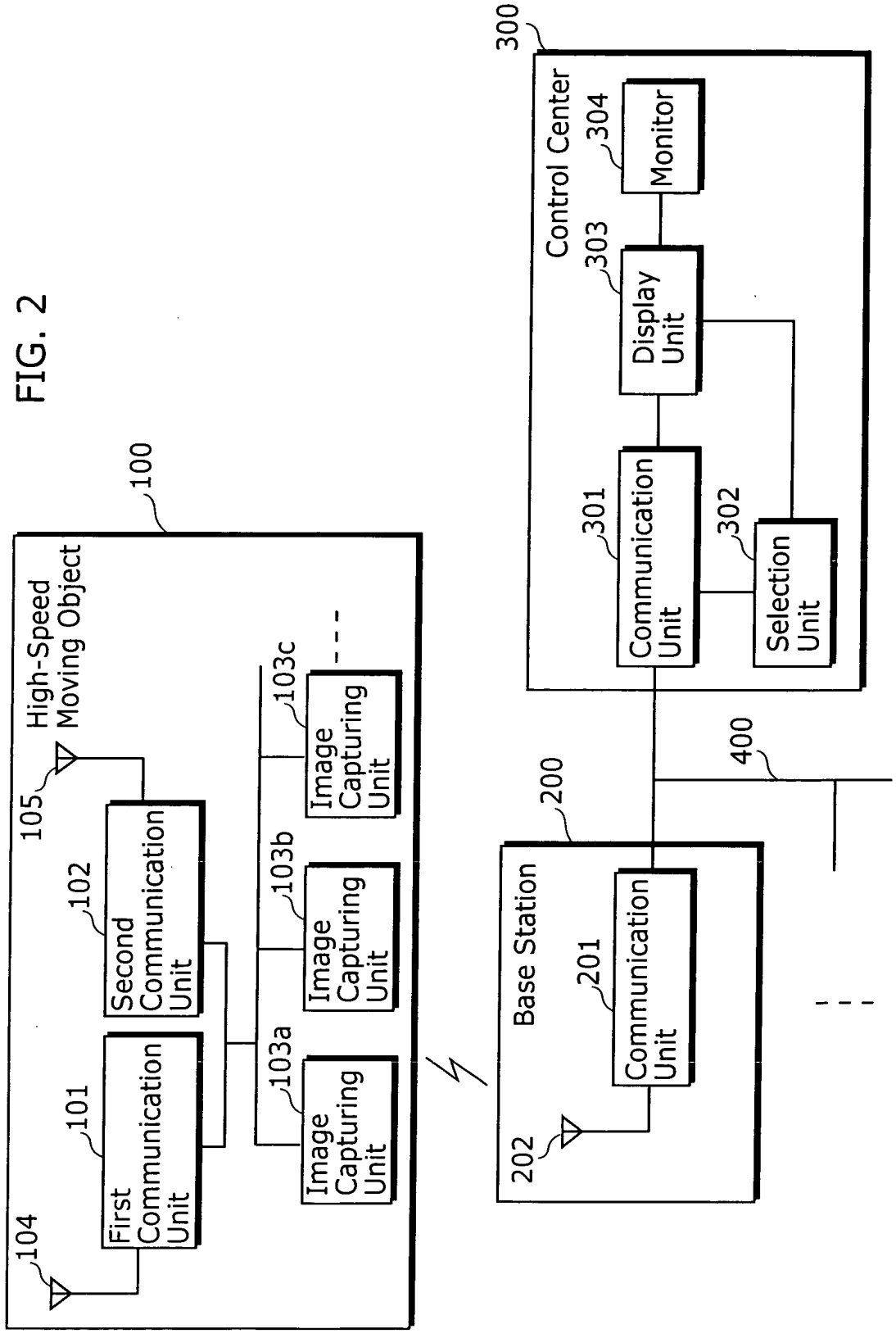

100
High-Speed Moving Object
105
104
First Communication Unit
101
Second Communication Unit
102
Image Capturing Unit
103a
Image Capturing Unit
103b
Image Capturing Unit
103c
200
Base Station
202
Communication Unit
201
400
300
Control Center
Communication Unit
301
Selection Unit
302
Display Unit
303
Monitor
304

FIG. 3

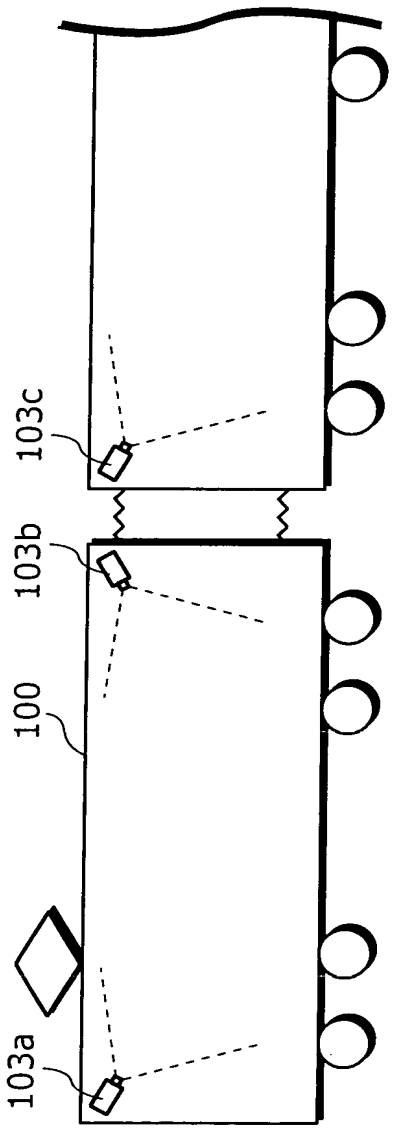


FIG. 4

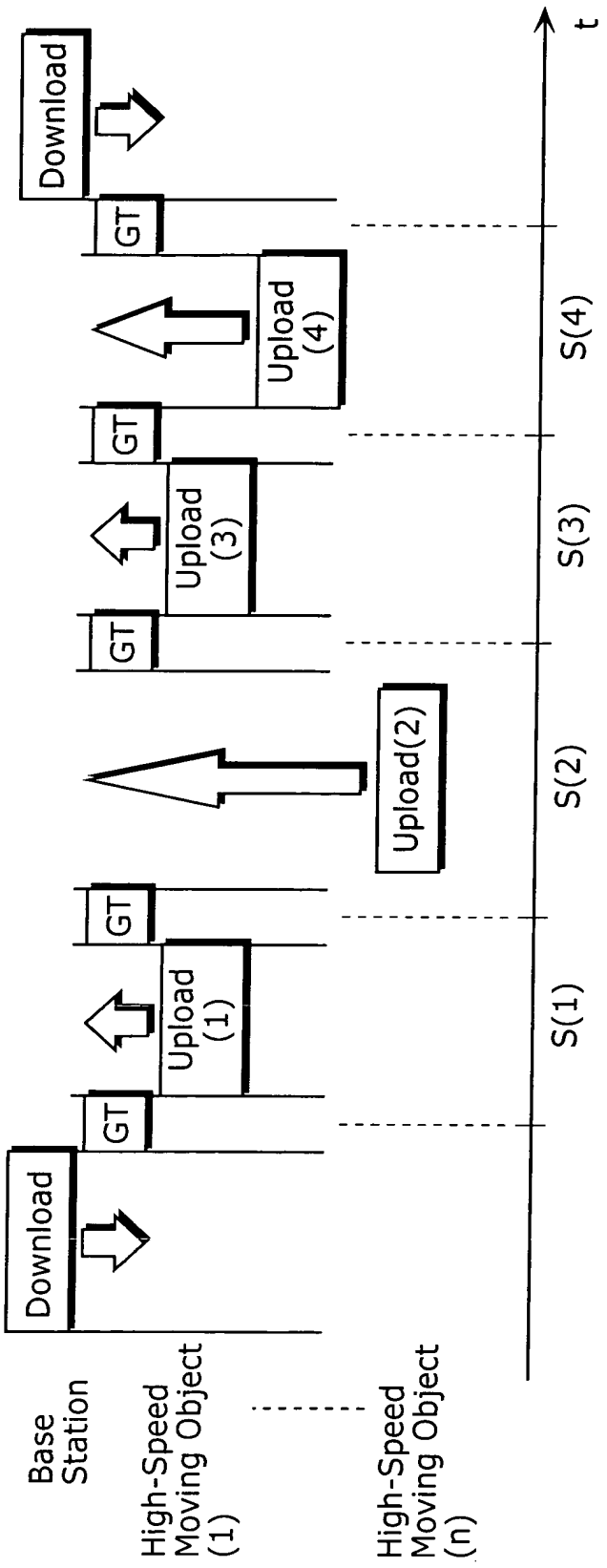

Base Station
High-Speed Moving Object (1)
High-Speed Moving Object (n)
Download
GT
Upload (1)
Upload(2)
Upload (3)
Upload (4)
S(1)
S(2)
S(3)
S(4)
t

FIG. 5

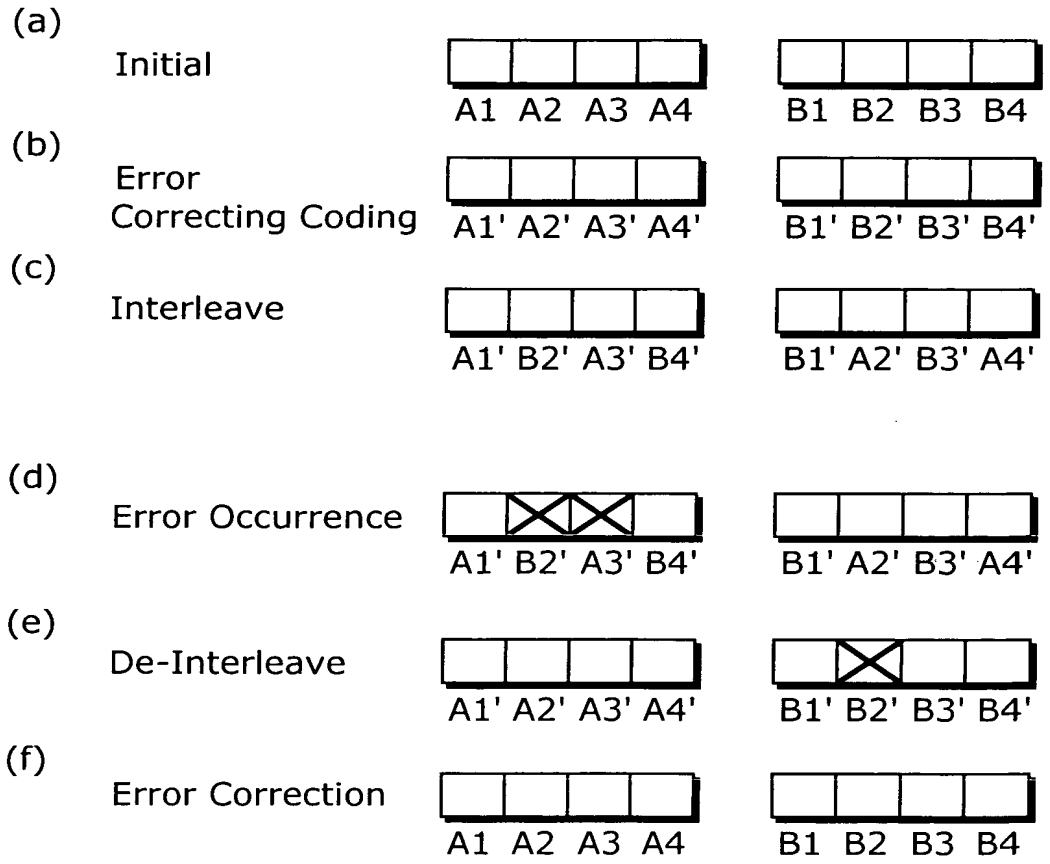

(a)
Initial
A1 A2 A3 A4
B1 B2 B3 B4
(b)
Error
Correcting Coding
A1' A2' A3' A4'
B1' B2' B3' B4'
(c)
Interleave
A1' B2' A3' B4'
B1' A2' B3' A4'
(d)
Error Occurrence
A1' B2' A3' B4'
B1' A2' B3' A4'
(e)
De-Interleave
A1' A2' A3' A4'
B1' B2' B3' B4'
(f)
Error Correction
A1 A2 A3 A4
B1 B2 B3 B4

FIG. 6

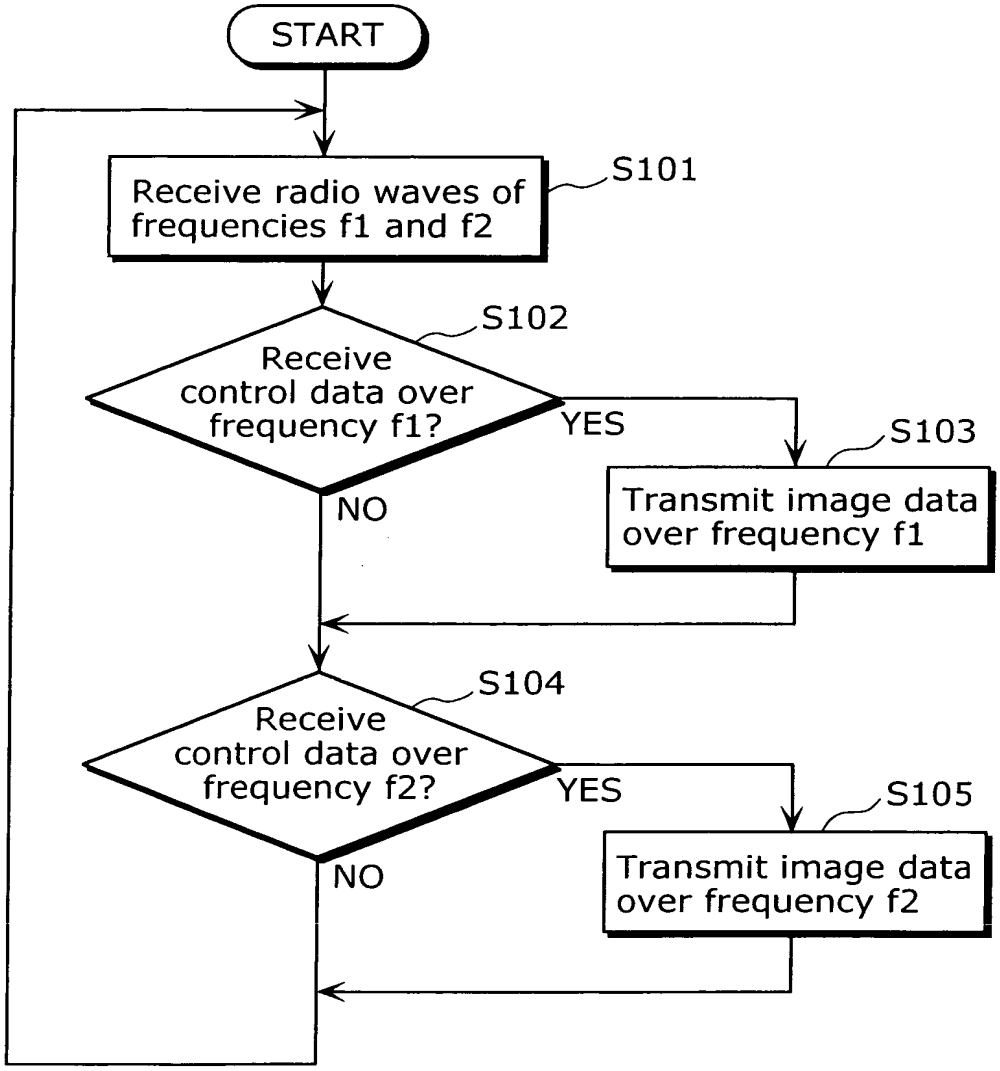
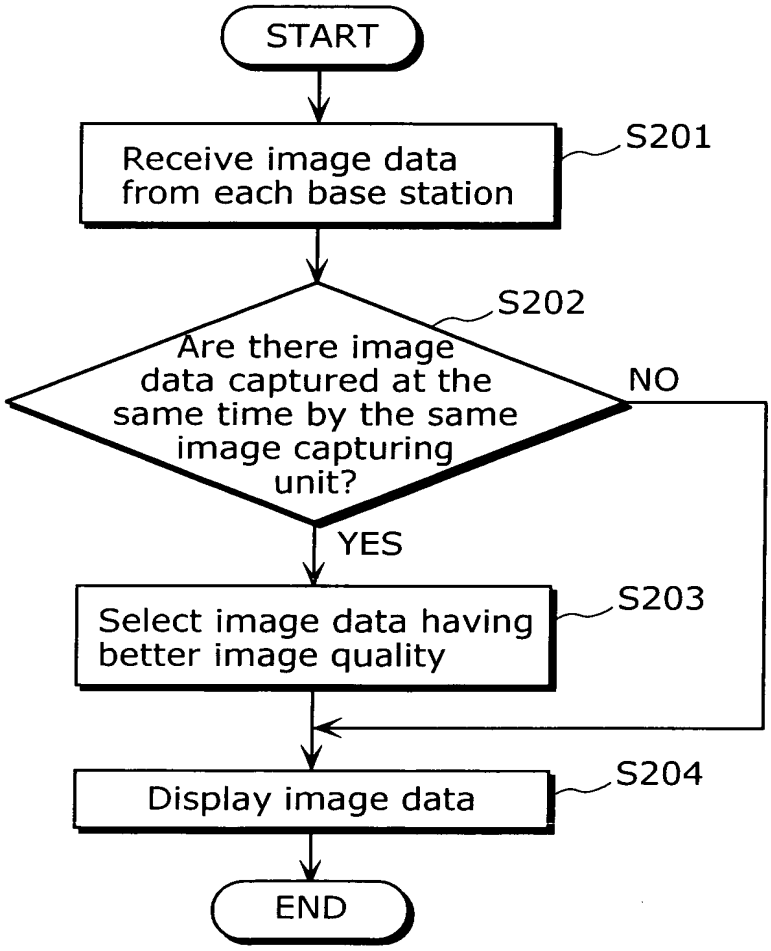

START
Receive radio waves of frequencies f1 and f2
S101
Receive control data over frequency f1?
S102
YES
NO
Transmit image data over frequency f1
S103
Receive control data over frequency f2?
S104
YES
NO
Transmit image data over frequency f2
S105

FIG. 7


START
Receive image data from each base station
S201
Are there image data captured at the same time by the same image capturing unit?
S202
NO
YES
Select image data having better image quality
S203
Display image data
S204
END

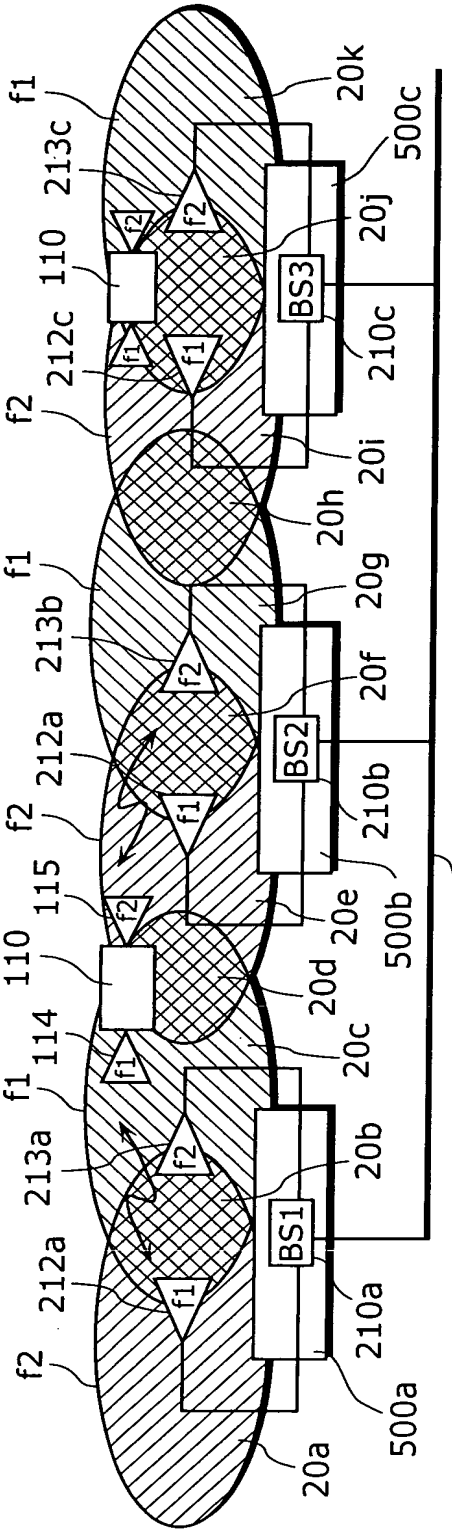

f1
213c
f2
110
212c
f1
f2
f1
f2
213b
212a
f2
115
110
114
f1
f1
213a
f2
212a
f1
f2
20a
500a
210a
BS1
20b
20c
20d
20e
500b
400
210b
BS2
20f
20g
20h
20i
210c
BS3
20j
500c
20k

FIG. 8A

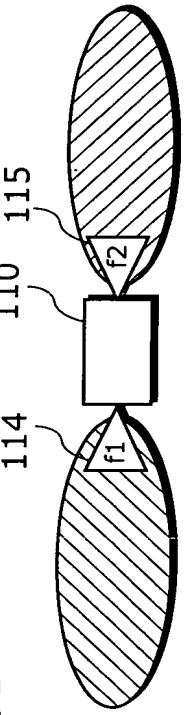

115
f2
110
114
f1

FIG. 8B

FIG. 9

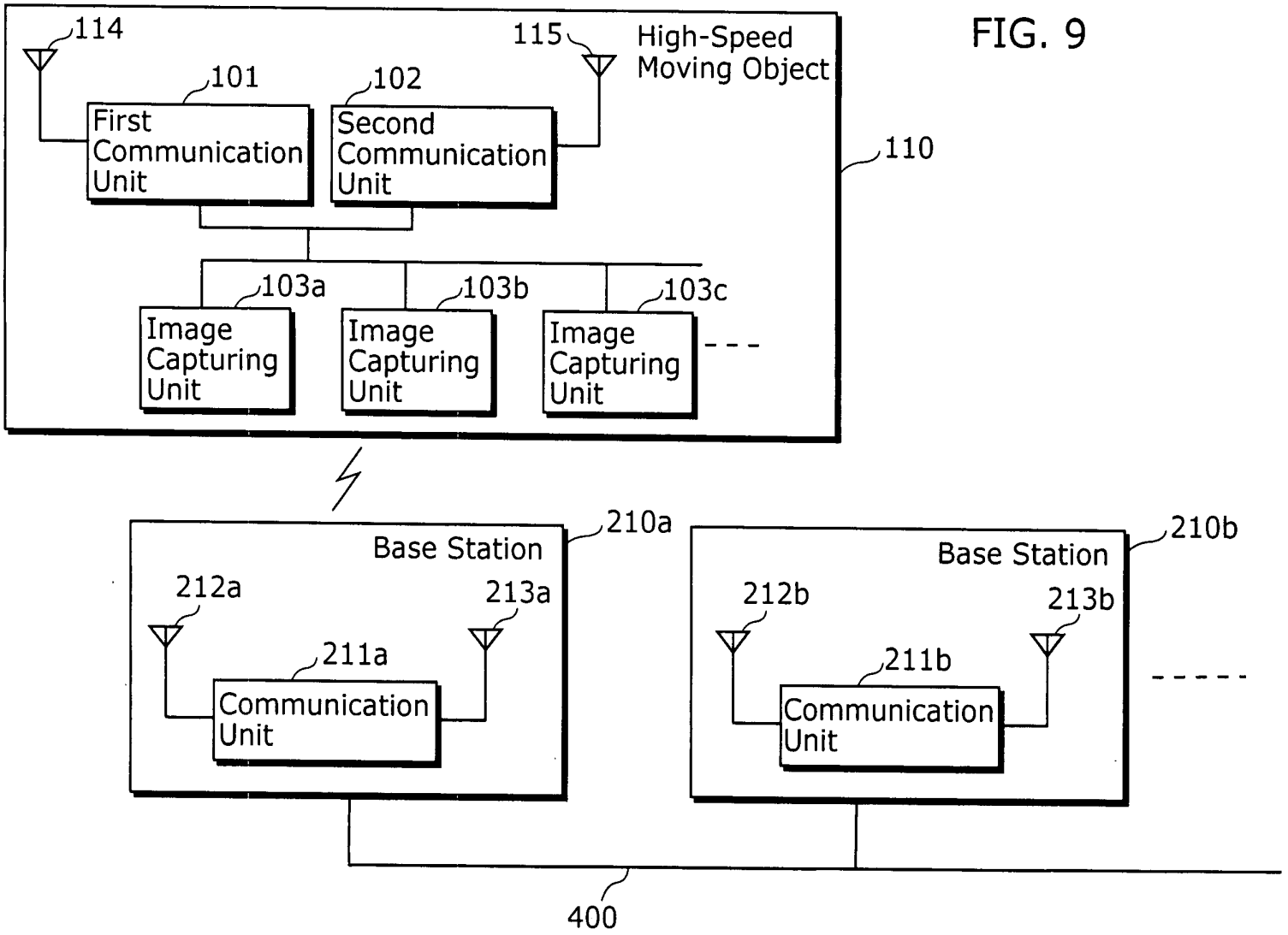

114
115
High-Speed Moving Object
101
102
First Communication Unit
Second Communication Unit
110
103a
103b
103c
Image Capturing Unit
Image Capturing Unit
Image Capturing Unit
210a
Base Station
212a
213a
211a
Communication Unit
210b
Base Station
212b
213b
211b
Communication Unit
400

FIG. 10

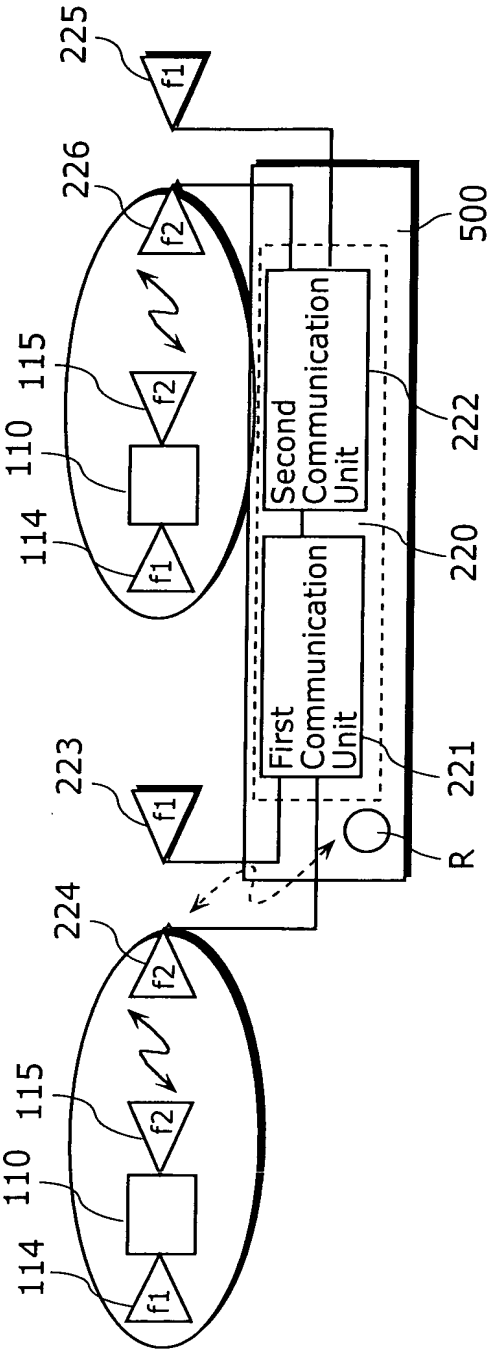

225
f1
226
f2
500
115
f2
110
Second Communication Unit
222
114
f1
220
First Communication Unit
221
223
f1
R
224
f2
115
f2
110
114
f1

FIG. 11A

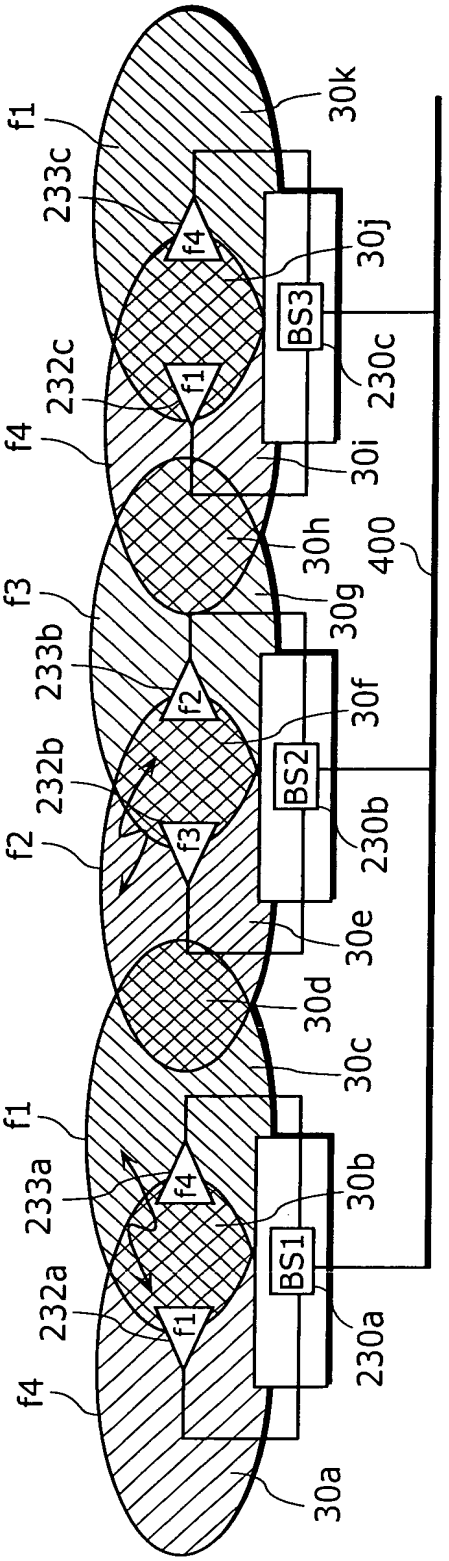


FIG. 11B

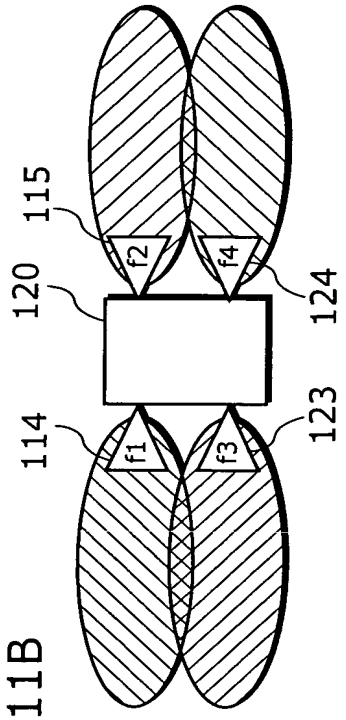


FIG. 12

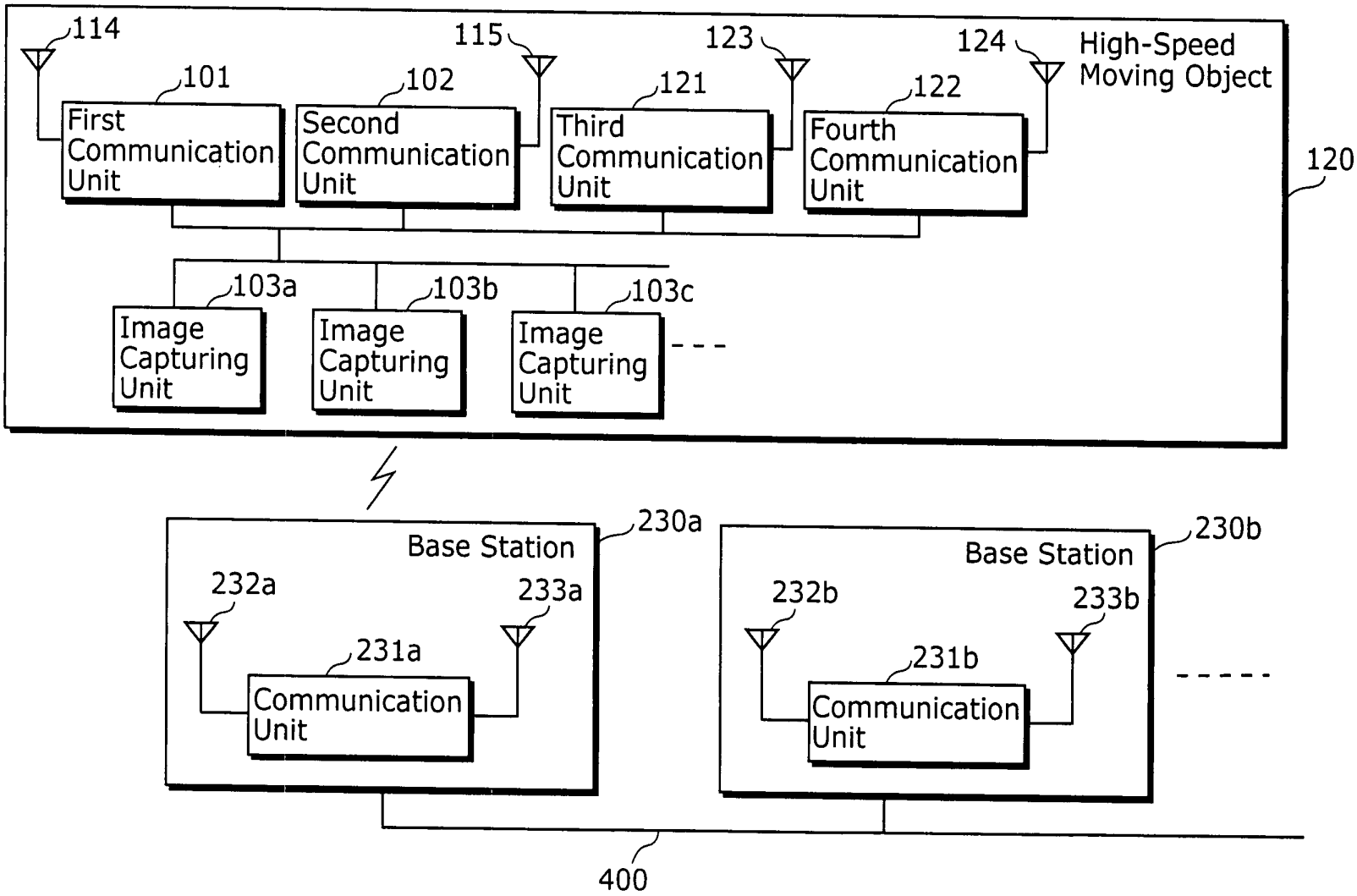

114
115
123
124
High-Speed Moving Object
101
102
121
122
First Communication Unit
Second Communication Unit
Third Communication Unit
Fourth Communication Unit
120
103a
103b
103c
Image Capturing Unit
Image Capturing Unit
Image Capturing Unit
230a
Base Station
232a
233a
231a
Communication Unit
230b
Base Station
232b
233b
231b
Communication Unit
400

FIG. 13A

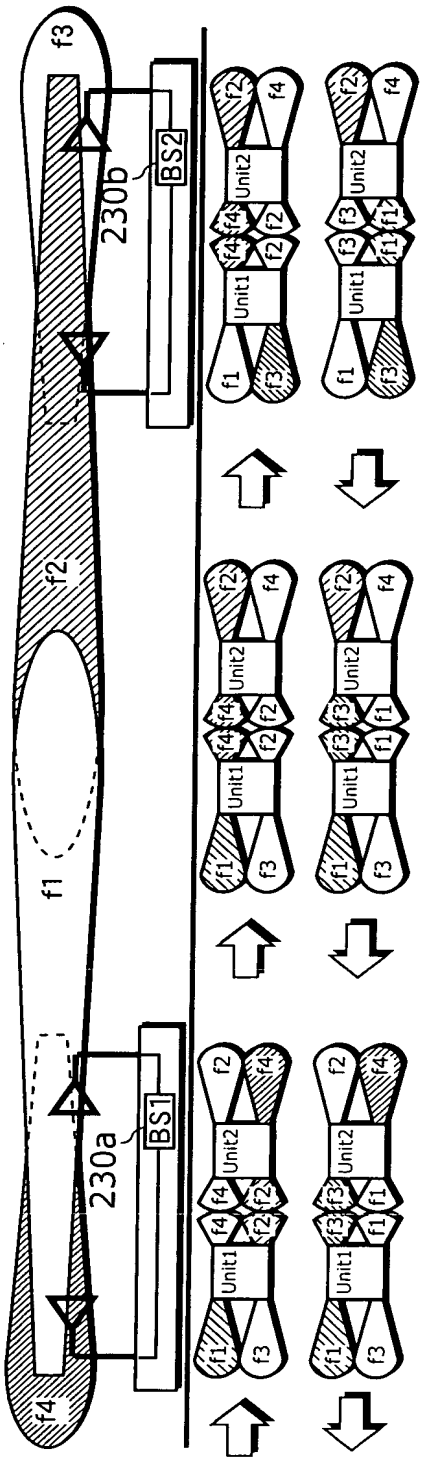


FIG. 13B

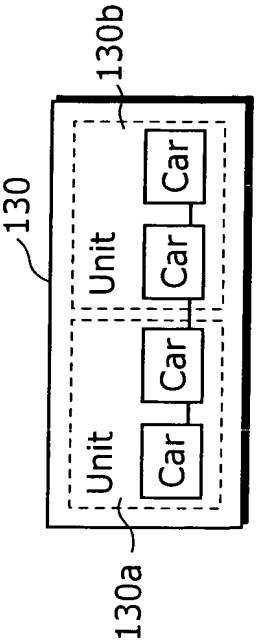


FIG. 14

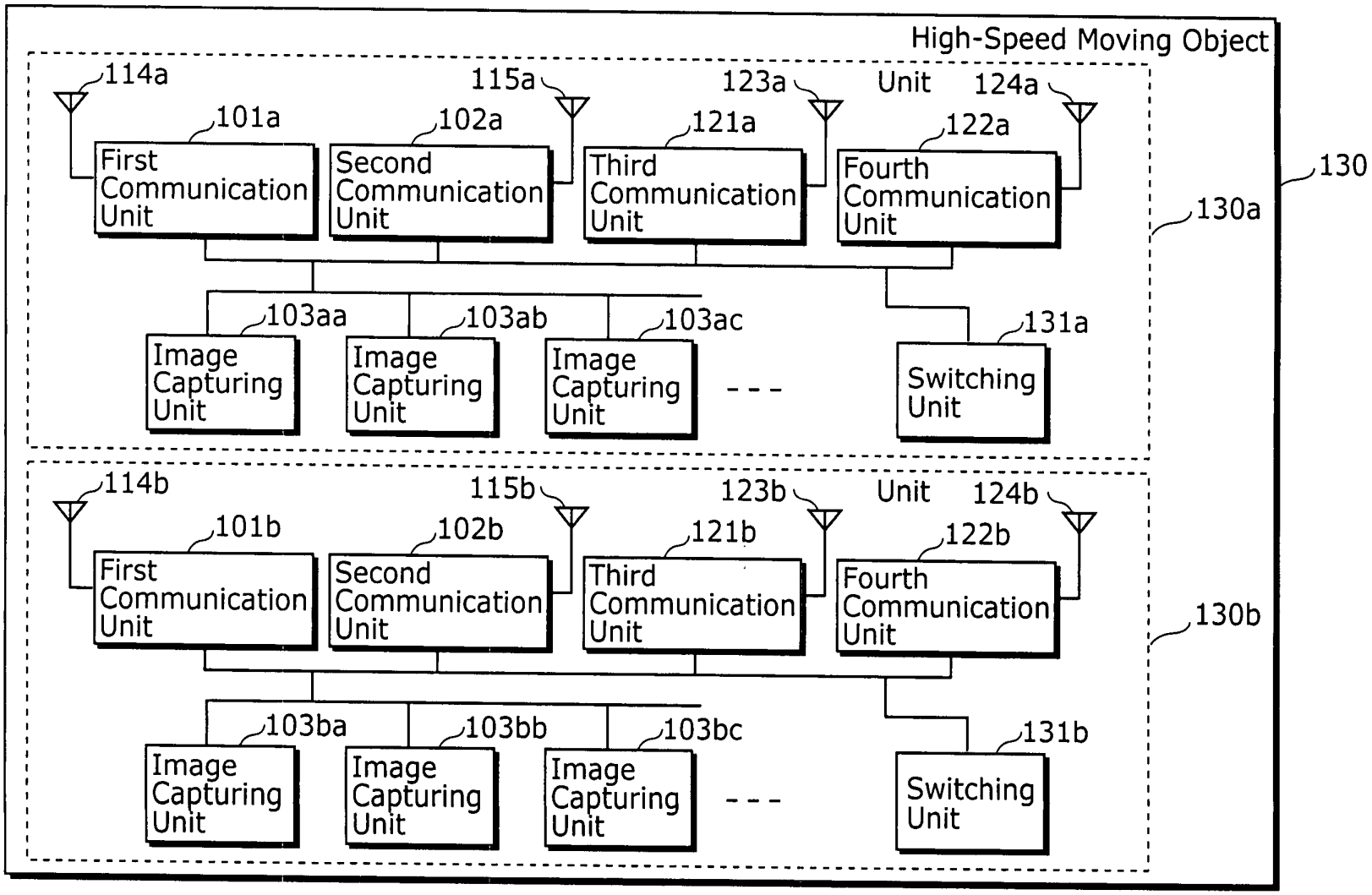

High-Speed Moving Object
114a
115a
123a
Unit
124a
101a
102a
121a
122a
First Communication Unit
Second Communication Unit
Third Communication Unit
Fourth Communication Unit
130
130a
103aa
103ab
103ac
131a
Image Capturing Unit
Image Capturing Unit
Image Capturing Unit
Switching Unit
114b
115b
123b
Unit
124b
101b
102b
121b
122b
First Communication Unit
Second Communication Unit
Third Communication Unit
Fourth Communication Unit
130b
103ba
103bb
103bc
131b
Image Capturing Unit
Image Capturing Unit
Image Capturing Unit
Switching Unit

FIG. 15

	Area 30a	Area 30b	Area 30c	Area 30d	Area 30e	Area 30f	Area 30g	Area 30h	Area 30i	Area 30j	Area 30k
Frequency for Communication with Base Station	f4	f4 f1	f1	f1 f2	f2	f2 f3	f3	f3 f4	f4	f4 f1	f1
Frequency for Communication between Units (inbound line)	f2	f2	f4	f4	f4	f4	f2	f2	f2	f2	f4
Frequency for Communication between Units (outbound line)	f1	f3	f3	f3	f3	f1	f1	f1	f1	f3	f3

FIG. 16

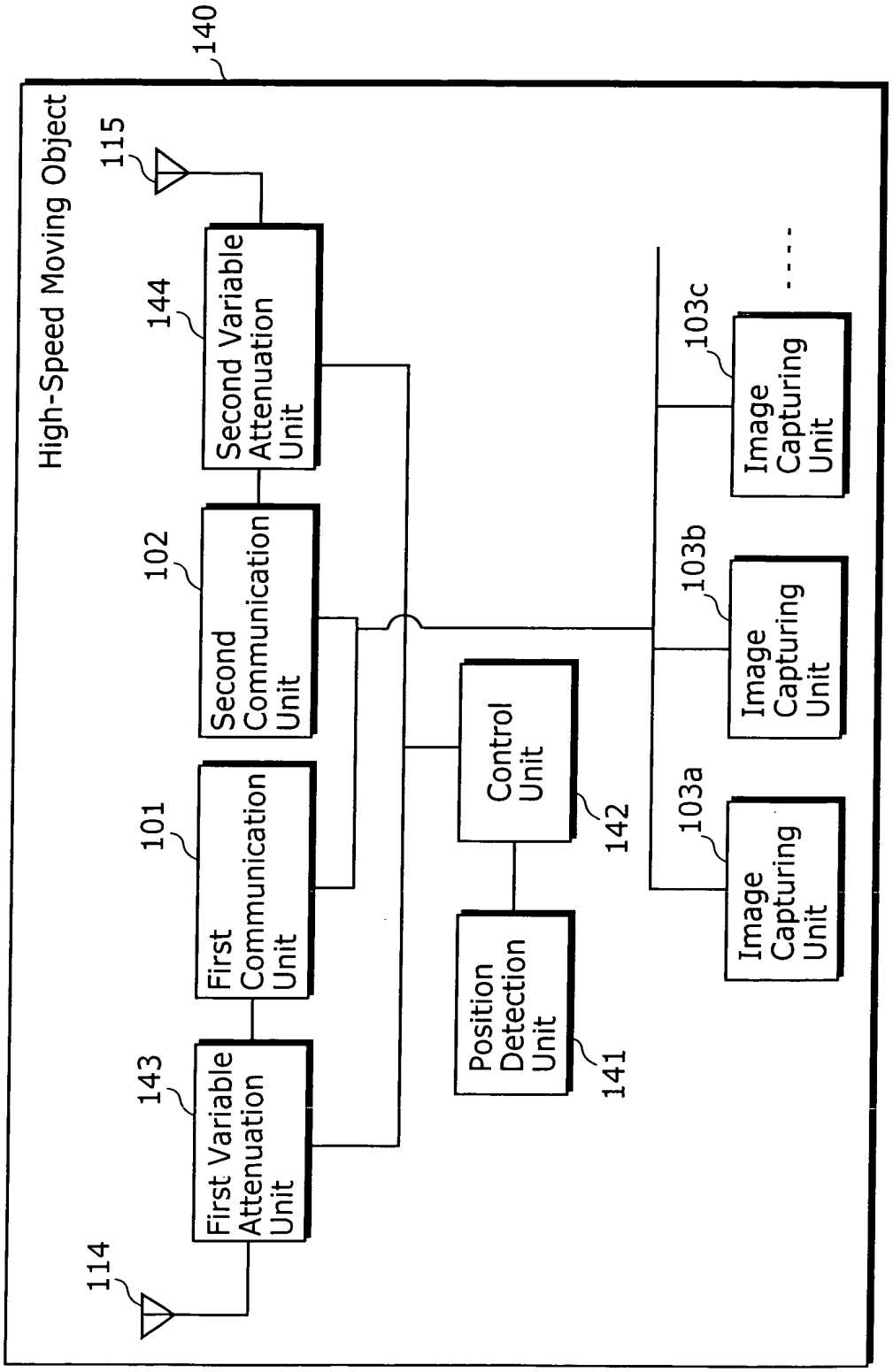

140
High-Speed Moving Object
115
144
Second Variable Attenuation Unit
102
Second Communication Unit
101
First Communication Unit
143
First Variable Attenuation Unit
114
Control Unit
142
Position Detection Unit
141
103a
Image Capturing Unit
103b
Image Capturing Unit
103c
Image Capturing Unit
- - - -

FIG. 17

	Between BS1 and BS2					Between BS2 and BS3		
Distance(m)	0 ~200	~450	~620	~780	~1030	0 ~270	~520	-----
Radio Wave Strength of First Communication Unit	2	4	6	8	10	2	4	-----
Radio Wave Strength of Second Communication Unit	10	8	6	4	2	10	8	-----

FIG. 18

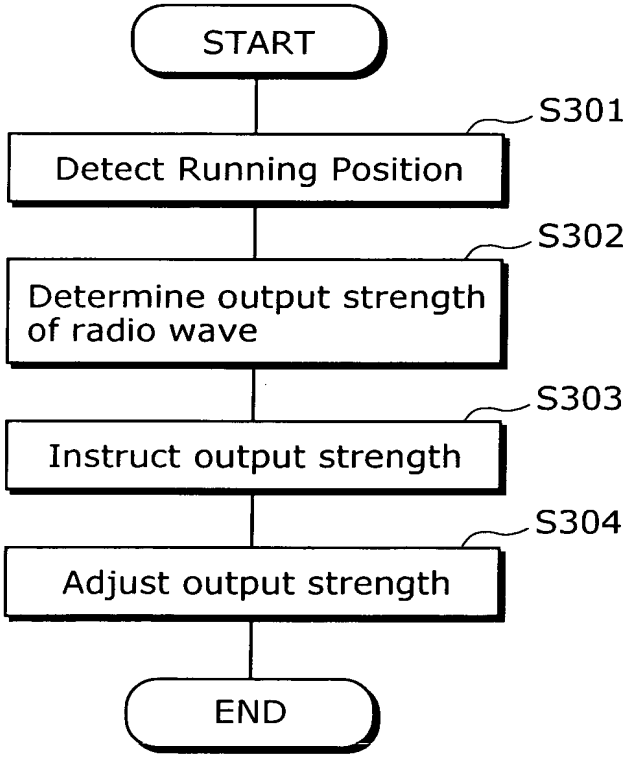

START
S301
Detect Running Position
S302
Determine output strength of radio wave
S303
Instruct output strength
S304
Adjust output strength
END

FIG. 19

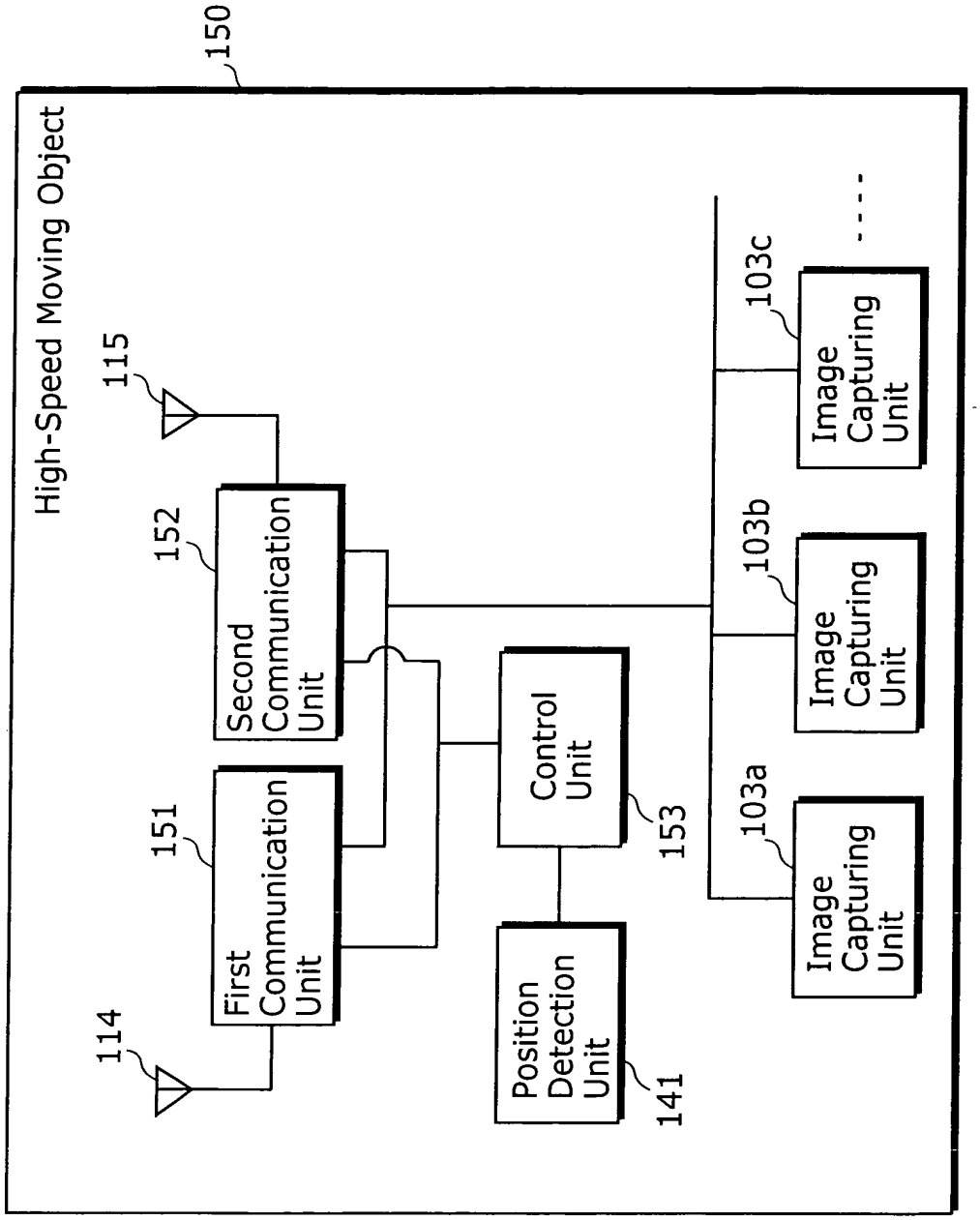

150
High-Speed Moving Object
115
152
Second Communication Unit
114
151
First Communication Unit
Control Unit
153
Position Detection Unit
141
103a
Image Capturing Unit
103b
Image Capturing Unit
103c
Image Capturing Unit
- - - -

FIG. 20

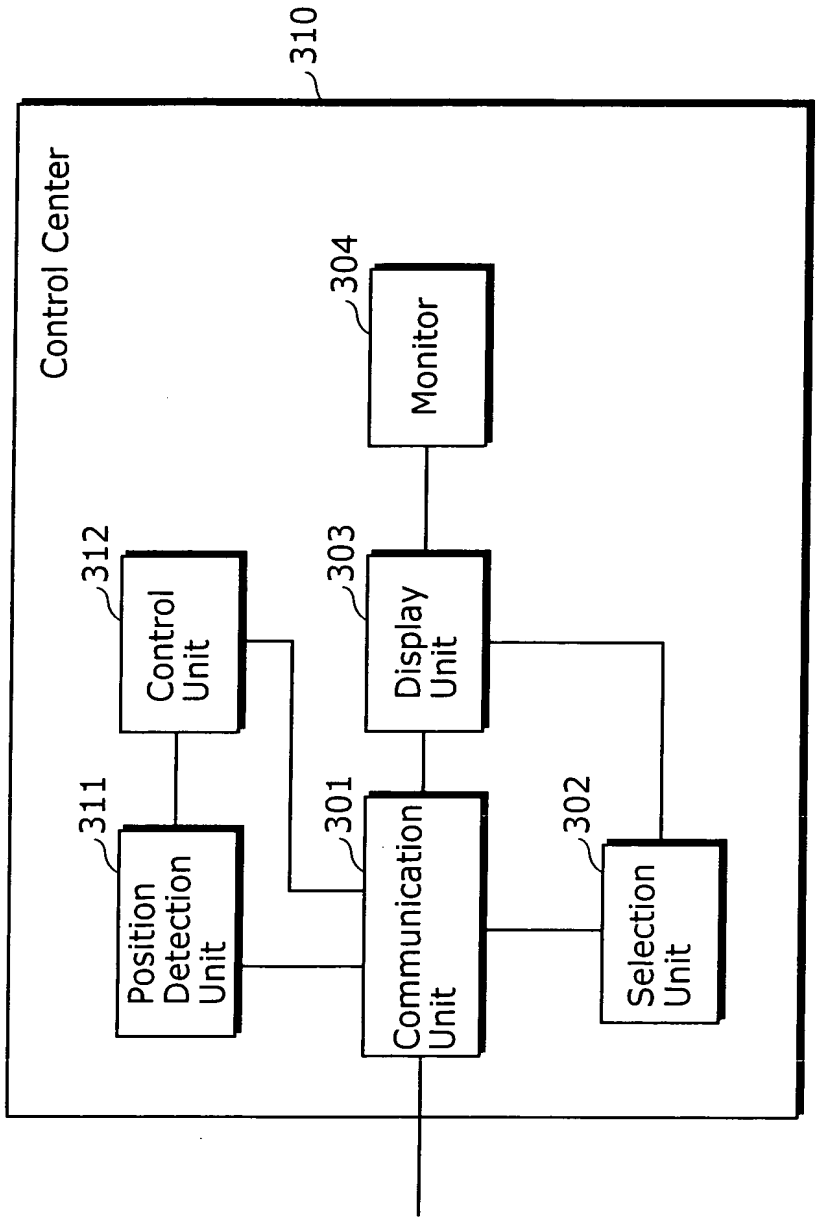

310
Control Center
304
Monitor
312
Control Unit
303
Display Unit
311
Position Detection Unit
301
Communication Unit
302
Selection Unit

FIG. 21

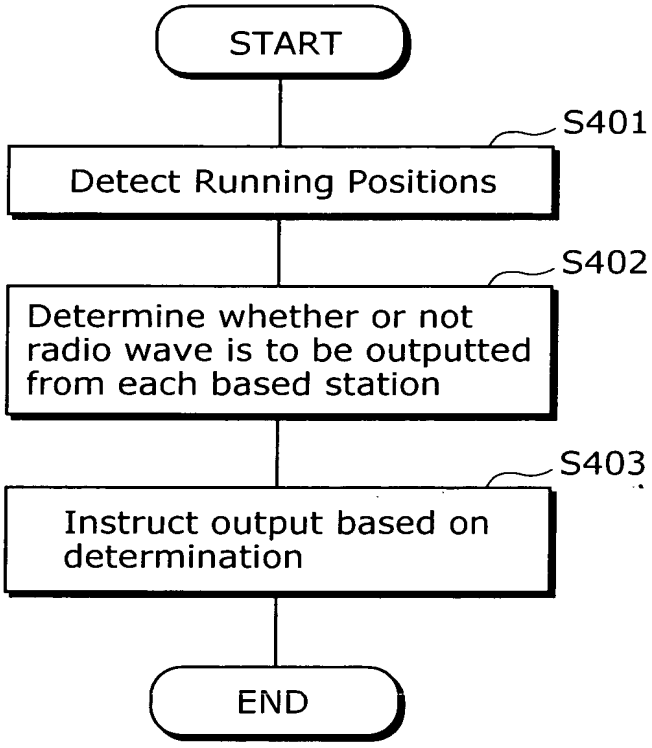
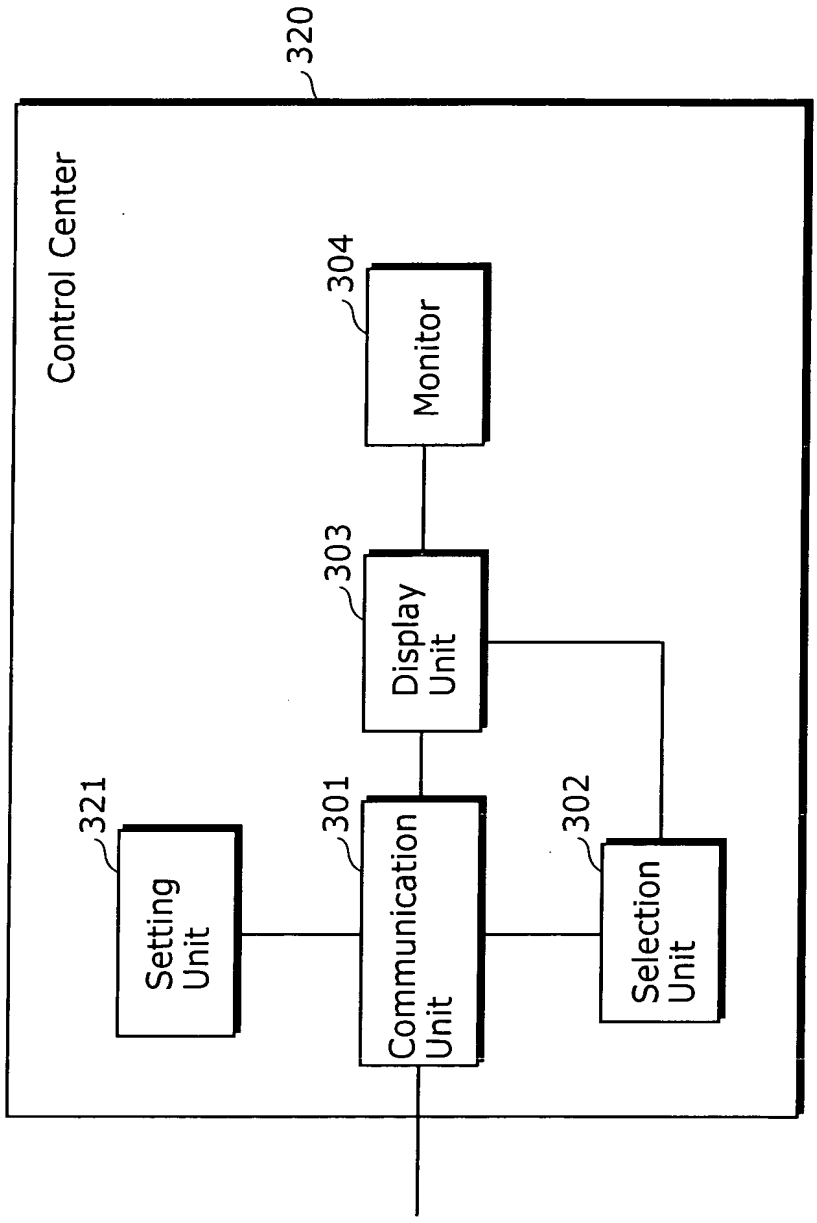

START
S401
Detect Running Positions
S402
Determine whether or not radio wave is to be outputted from each based station
S403
Instruct output based on determination
END

FIG. 22


320
Control Center
304
Monitor
303
Display Unit
321
Setting Unit
301
Communication Unit
302
Selection Unit